

UNITED STATES DEPARTMENT OF AGRICULTURE



Natural
Resources
Conservation
Service

Tennessee Job Sheet
Fishpond Management
Conservation Practice 399
March 2005



(Photo courtesy of the Natural Resources Conservation Service.)

PROBLEM

Filamentous algae is the slimy, long strand “pond scum” found at pond edges beginning in early spring. Algae can infest the entire pond.

TREATMENT

- Copper Sulfate is the generally preferred initial treatment because of its low cost, availability, and having no restrictions for livestock watering, fish consumption, or irrigation. There are also other algaecides available.
- Treat in early spring when the water surface temperature is between 55 and 60 degrees. When the water temperature is above 70, treat only one-third of the pond in rotation with a two-week period between treatments to avoid oxygen depletion. Discontinue treatment after mid-summer.
- Apply 5 pounds of copper sulfate (blue stone or snow) per acre foot.
- Do not apply more than 5 pounds per acre foot when the pH is less than 6.5. Excess copper can harm fish. Copper sulfate may be effective on algae, but not on other pond weeds.
- Do not use copper sulfate in trout ponds.

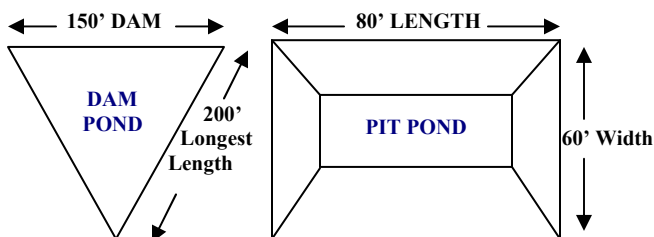
FIGURING POND SURFACE AREA

- Measure surface area of a dam pond by pacing the dam and the longest shoreline. Multiply one-half the length of the dam times the longest shoreline in feet and divide by 43,560.
- Measure the surface area of a pit pond by pacing the length and width. Multiply the length times the width in feet and divide by 43,560.

Examples:

$$\frac{150' \times 0.5 \times 200'}{43,560} = 0.3 \text{ acre}$$

$$\frac{80' \times 60'}{43,560} = 0.1 \text{ acre}$$



FIGURING POND VOLUME

Estimate your pond volume in acre feet by multiplying the surface area in acres times one-half the maximum depth in feet.

Examples: Dam Pond – 0.3 acre X 10' X 0.5 = 1.5 acre feet
Pit Pond – 0.1 acre X 10' X 0.5 = 0.5 acre feet

THREE METHODS OF APPLICATION

- Using rubber gloves, copper sulfate can be broadcast from the shore.
- Mix copper sulfate in a spray tank and apply it directly on the water. Use a glass lined or plastic spray tank only, not metal.
- Place the material in a burlap sack and drag it behind a boat.

For long-term control, stock 5-8 White Amur fish (Grass Carp) per surface acre. In an existing bass population pond, the grass carp should be 8 inches or longer.

Other job sheets are available from the Natural Resources Conservation Service. For additional information, contact your local USDA Service Center, Natural Resources Conservation Service office, or your local County Soil Conservation District office.

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